IMPACT Research, Inc.
INFORMATION SERVICES CONSULTING

RICHARD L. PETERSON, Ph.D.
President

December 22, 1994

Mr. Thomas O'Flaherty, Vice President
INPUT
Atrium at Glenpointe
400 Frank W. Burr Boulevard
Teaneck, NJ 07666

***** INVOICE *****

Current Billings:

Professional Fee:	
Remaining 50% of total fee for SAP-related profile information development	$2,500.00

Expenses:	Billed Separately
Travel/Entertainment	$0.00
Miscellaneous	0.00
Total	0.00

Total Due: **$2,500.00**

Thank you!

Federal ID: 22-2878-130

OK PR 12/27/94 WIEDI

Tom,
The job's completed, but I don't have my first payment yet. Would you please do everything you can to expedite payment of this second invoice.

Thanks

37 Fairview Place • P.O. Box 43275 • Upper Montclair, NJ 07043
Voice: (201) 746-4720 • Fax: (201) 746-0425

NOV-22-1994 14:00 610 617 9647 P.01

Fax transmittal memo 7

To Thomas O'Flaherty
Company INPUT
Location
Fax # 201-801-0441
Telephone # 201-801-0050
Comments

No. of Pages 6
Today's Date 11/22/94
Time
From RICHARD G. SCOTT
Company EDS /mcs
Location
Dept. Charge
Fax # 610-617-9647
Telephone # 610-617-9645
Original Disposition ☐ Destroy ☐ Return ☐ Call for pickup

Please accept the following, as amended, as formal authorization to proceed. I will be your point of contact. Please invoice me directly. Thank you.

11/22/94 12:26 ☎201 801 0441 INPUT 002/007

REVISED PROPOSAL

AN ANALYSIS OF THE KEY SUPPLIERS OF SAP-RELATED SERVICES

Submitted to

EDS

November 22, 1994

Prepared by

INPUT

Atrium at Glenpointe
400 Frank W. Burr Boulevard
Teaneck, NJ 07666

201-801-0050
Fax: 201-801-0441

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AN ANALYSIS OF THE KEY SUPPLIERS OF SAP-RELATED SERVICES

I. OBJECTIVES

The primary objective of this study is to supply information on the market and competitive position of four key suppliers of SAP related services (Andersen, Price Waterhouse, Deloitte & Touche and ICS).

In addition, INPUT will provide an overview of current SAP installations and an assessment of potential opportunities for EDS in key industry segments.

II. SCOPE

The study will address the following questions:

Plse. identify SIC or range of SIC within vertical.

- What is the distribution of R2 and R3 installations by geography and vertical market?
- Who are high profile SAP clients by geography and vertical market? Are they fully installed or still in progress? Which customer business units or functions are involved?
- What is the market share for SAP-related services by the leading services suppliers, broken out by
  - R2 and R3 projects
  - Projects completed and those in process
  - U.S. and international
  - Note: R3-related information is ~~more important~~ the primary focus!
- What are the major services now supplied by the four key competitors? (E.g., design, integration, modification, installation, support.) If there are gaps in services offered, does the vendor plan to add them?

Andersen
Price Waterhouse
Deloitte & Touche
ICS

- What is each firm's market strategies and sales process? How are leads generated and followed up? Is there a dedicated sales force? Are standard proposal templates used?
- What pricing approaches are used (e.g., fixed, time and materials, contingency)?
- What are these firms' relationships with hardware vendors (concerning SAP)?

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- What is a typical SAP engagement profile for each of the four suppliers (number of staff, project duration, services provided, organization, etc.)?
- Are standard process models used, for example by function/application or industry? What development tools are used?
- How many consultants does each firm have that is experienced in SAP? How are they rated or classified? To what extent is the experience derived from formal training or OJT?
- Do these suppliers use "centers of excellence" or analogous units? How are they utilized? What does SAP contribute?
- What is SAP's strategy and approach to working with services providers?
- What does each firm see as its special strengths in this area? Who does each firm see as its major competition in this area?
- To what extent do these firms plan to change their approach or offerings?
- How do customers select vendor-supplied R3-related services? This includes:
  - Why are consultants used and for what type of services?
  - What are the principal vendor selection criteria, including (but not limited to)
    - Certification
    - Number of experienced people available
    - Specific people assigned to customer
    - References
    - Experience in customer's industry or process
    - Price and pricing approach
    - Experience in functional area (e.g., design, modification, interfacing, training, installation)
  - What are the comparative ratings of service providers?
  - How does the selection process work?
- What is INPUT's assessment of each firm, now and in the future?
- What is INPUT's assessment of the major opportunities for supplying SAP-related services, e.g., by industry segment, by process, by application, etc.?

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III. METHODOLOGY

INPUT will use the following sources of information to answer the questions in "Scope"; the sources are listed in the order of their relative importance:

- Interviews with executives and consultants within the organizations of the four organizations. INPUT expects to perform multiple interviews with each organization. INPUT will not be seeking proprietary information from suppliers; much of EDS' requirements are for "grey area" information that is not ordinarily released publicly.
- Interviews with current and former SAP employees.
- Information already in INPUT's possession on SAP and the service suppliers. (E.g., INPUT has had briefings with current and former SAP America management and similar briefings by providers of SAP-related services.) This information will need to be expanded and updated to meet EDS' needs.
- Interviews with 30 SAP accounts.

As an incentive to provide information, respondents will be supplied with a sanitized summary of information learned. This summary will be designed not to affect EDS' options or competitive position and will be reviewed with EDS prior to release.

Results will be provided to EDS in matrix form. INPUT will meet with EDS after the initial results have been provided to make a presentation of results.

INPUT will provide results to EDS within one month of authorization. In view of the limited time available and the fact that much of the work will take place during the holiday season, INPUT warrants that 90% of the cells in the matrix will be completed in the time allotted; INPUT will aim for 100% completion.

IV. QUALIFICATIONS

INPUT is very well qualified to conduct this study, both because of the firm's experience and because of the people who will be assigned to the study.

A. INPUT's Experience

- INPUT's subscription programs provide a foundation of knowledge on
  - The manufacturing (and other) vertical industries.

- The systems integration and professional services markets and vendors.
- Exhibit 1 summarizes these program offerings.

- INPUT is very experienced in obtaining hard-to-find information from a variety of sources. Each year INPUT conducts over 5,000 personal interviews, many with key decision making individuals.
- INPUT has well-placed, responsive contacts throughout all major services organizations.
- INPUT has conducted multiple custom studies over the last year focusing on manufacturing environments needs for software and services; this provides INPUT with hard-to-match access on short notice to many of the people from whom information will be collated for this study.
- Earlier this year, INPUT conducted an in-depth study on SAP's operations and customers world-wide; this provides INPUT with an excellent knowledge base for this market area.

B. Study Staffing

Due to the nature of the study and the aggressive schedule, the study will be staffed with senior personnel:

- Thomas O'Flaherty, Vice President
- Robert Goodwin, Vice President
- John McGann, Principal Consultant

Their biographies are attached.

Other staff will work on this assignment as their skills are needed.

V. FEE

INPUT's fee for this project is $41,000, including expenses. One-half of this fee ($25,500) is due and payable upon authorization. The remainder of the fee is due upon the submission of the report.

This proposal will remain valid for thirty days, unless extended in writing.

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VI. AUTHORIZATION

To authorize the project as specified, please sign and return one copy of this proposal, along with the initial fee. Upon acceptance by INPUT, a countersigned copy of the proposal will be returned to EDS.

AUTHORIZED BY: EDS	ACCEPTED BY: INPUT
Name: Dyott Trotter	Name:
Title: Managing Principal	Title:
Date: 22 Nov 94	Date:

TOTAL P.06

INPUT IT Intelligence Services

400 Frank W. Burr Blvd.
Teaneck, NJ 07666
Tel. (201) 801-0050
Fax (201) 801-0441

November 15, 1994

Mr. Ronald York
Principal
TAS - Engineering/Manufacturing
H3-2E-70
5400 Legacy Drive
Plano, TX 75024

via fax 214-605-0885

Dear Ron:

We have prepared the attached proposal which addresses your need for an analysis of key suppliers of SAP-related services.

We understand your need for a rapid response and will do everything we can to provide thorough, quality information and analysis as soon as possible.

If you have questions or comments, you may contact either one of us.

We look forward to working with you and believe that INPUT can add considerable value to this study.

Sincerely,

Thomas O'Flaherty
Vice President
210-801-0050

Robert Goodwin
Vice President
415-961-3300

Attachment

Preliminary Report

AN ANALYSIS OF THE KEY SUPPLIERS OF SAP RELATED SERVICES

Submitted to

EDS

December 22, 1994

Prepared by

INPUT

Atrium at Glenpointe
400 Frank W. Burr Boulevard
Teaneck, NJ 07666

201-801-0050
Fax: 201-801-0441

An Analysis of the Key Suppliers of SAP Related Services

I. Objectives and Scope

Supply information on the market and competitive position of four key suppliers of SAP related services (Andersen Consulting, Price Waterhouse, Deloitte & Touche and ICS. This information will include an overview of current SAP installations and an assessment of potential opportunities in key industry segments.

The questions that the study will address are listed below:

- What is the distribution of R2 and R3 installations by geography and vertical market?
- Who are high profile SAP clients by geography and vertical market? Are they fully installed or still in progress? Which customer business units or functions are involved?
- What is the market share for SAP-related services by the leading services suppliers, broken out by
  - R2 and R3 projects
  - Projects completed and those in process
  - U.S. and international
  - Note: R3-related information is more important.
- What are the major services now supplied by the four key competitors? (E.g., design, integration, modification, installation, support.) If there are gaps in services offered, does the vendor plan to add them?
- What is each firm's market strategies and sales process? How are leads generated and followed up? Is there a dedicated sales force? Are standard proposal templates used?
- What pricing approaches are used (e.g., fixed, time and materials, contingency)?
- What are these firms' relationships with hardware vendors (concerning SAP)?

- What is a typical SAP engagement profile for each of the four suppliers (number of staff, project duration, services provided, organization, etc.)?

- Are standard process models used, for example by function/application or industry? What development tools are used?

- How many consultants does each firm have that is experienced in SAP? How are they rated or classified? To what extent is the experience derived from formal training or OJT?

- Do these suppliers use "centers of excellence" or analogous units? How are they utilized? What does SAP contribute?

- What is SAP's strategy and approach to working with services providers?

- What does each firm see as its special strengths in this area? Who does each firm see as its major competition in this area?

- To what extent do these firms plan to change their approach or offerings?

- How do customers select vendor-supplied R3-related services? This includes:

  - Why are consultants used and for what type of services?
  - What are the principal vendor selection criteria, including (but not limited to)
    - -- Certification
    - -- Number of experienced people available
    - -- Specific people assigned to customer
    - -- References
    - -- Experience in customer's industry or process
    - -- Price and pricing approach
    - -- Experience in functional area (e.g., design, modification, interfacing, training, installation)
  - What are the comparative ratings of service providers?
  - How does the selection process work?

- What is INPUT's assessment of each firm, now and in the future?

- What is INPUT's assessment of the major opportunities for supplying SAP-related services, e.g., by industry segment, by process, by application, etc.?

II. Executive Summary

A. Overview

Detailed answers to questions of EDS were obtained from the four key suppliers and are listed in Section III by supplier and by question. A summary of information collected from user interviews is provided in section IV together with conclusions based on the user data. Overall conclusions that INPUT has formed on the basis of the study are discussed below.

B. Conclusions

SAP work provides long, profitable assignments for the four key suppliers and other vendors. Users report decision times averaging 8.6 months for R3 projects and implementation times in excess of 17 months for R3 projects. R2 projects take somewhat less.

The trend is for R2 projects to decrease. Most prospects are considering R3 installations. The ratio of R3 to R2 projects among a sample of users was 10:3.

Support is needed in planning for and using SAP software according to a high percentage of both users who utilized support vendors and those who did not. Reengineering or restructuring of business must be done, and the use of SAP software products requires a high level of expertise. According to users, the reason for using SAP software is that it provides a truly integrated and full set of business functions, particularly for manufacturing. Several R3 users also note that it provides the only fully integrated set of software products for client/server products.

In the sample of users, Andersen Consulting was the leading vendor in assignments, perceived strengths, support personnel, and the ability to gain "pull through revenue" among the key suppliers. ICS and Price Waterhouse ranked about the same in number of assignments and perceived strengths. However, ICS and PW were ranked higher on the average than Andersen in terms of knowledge and capabilities to support R2 and R3 work.

A group of vendors including IBM and SHL are trying to gain more strength in SAP software so that they can reach the level of the key suppliers.

Users report on a very consistent basis that support providers need a high level of knowledge of SAP software, the ability to run projects involved with this software, and sufficient resources to respond rapidly to needs and opportunities.

Industry knowledge is considered valuable according to users, but SAP knowledge is more important.

The key SAP support vendors state their SAP strength in a way that reassures SAP prospects but that can be misleading. They describe their strength to staff projects in terms of the core number of personnel that fully know R3 (or R2) plus the people who can work on this type of complex project. When specifically asked about the core strength, they will provide a smaller number.

The key vendors attempt to gain "pull through" revenue by gaining the reengineering work involved with a SAP assignment (vendors other than the key vendors are used in some), providing SAP overview training including client/server training, hardware advice/procurement, performing add-on projects, and persuading users to employ only their staff and not to hire staff from a contract vendor to use together with their support staff. Users try to save money by using a mix of staff from the key vendor and professional services firms. Andersen may add as much as 50% to revenue by these means, PW over 35%, D & T and ICS over 15%.

As part of their sales strategies, support vendors utilize contacts with SAP and industry associations to obtain leads as well as presentations and support material. (A disk that PW uses is included with this report.) All key vendors try to uncover opportunities through a broad brush contact process rather than a dedicated sales force. ICS is more dedicated since it does mostly SAP work.

Users report that presentations, assessment of SAP strengths and resources, reference checking in their industries or related ones, assurance that knowledgeable people will be assigned, and price are selection factors. If it isn't possible to decide among vendors, multiple vendors may be used (8 of 23 projects using vendors used multiple vendors.)

C. Assessment of Support Providers and Potential Business

For the near term, Andersen will continue to be dominant. They come in contact with more leads through their practice. They are active in the industries that have high SAP usage (chemicals, consumer goods, oil and gas). They have more trained SAP resources. They are recognized for their SAP and industry strength. They are addressing opportunities in a more organized way. Most users feel they are a good choice for aid.

Price Waterhouse will not attack Andersen's leadership. They will be in second, third or fourth place. They are not looking for leads everywhere as intensely as Andersen is. They don't attack situations in the organized way Andersen does. In the user survey, PW had one assignment as the lone vendor in charge of a project and 5 R2 and R3 assignments as part of a team. Andersen had 6 lone projects and 3 as part of a team. PW is recognized for their SAP and industry knowledge and

their resource size and make good presentations on SAP; so they will continue to get business.

Deloitte & Touche has knowledge of SAP software and industries where it can be used. They have also been seeking leads and gaining business. They have often wound up as part of a vendor team so they are not seeking business as aggressively as Andersen. They have also obtained business from SAP to support sites. They will continue to be in the first 3 or 4 vendors, but could fall to a lower position since some of their users claim that they are not keeping their strength up to date.

ICS has gained recognition as having one of the highest if not the highest level of knowledge of SAP. (They are rated highest among the 4 vendors.) They are also mentioned as a company dedicated to SAP. They are growing extremely rapidly. However, ICS may not be able to support or manage an effort to provide the resources necessary to overtake Deloitte & Touche or Price Waterhouse in total SAP business. An alliance with a strong IT firm could aid them to seize their current opportunity.

Users stress that the oil and gas, chemical, consumer goods and high technology discrete industries are good targets for SAP software. Information from vendors confirms this. Until these industries are saturated, they present opportunities. However, discrete and process manufacturing segments not yet addressed and some new targets such as wholesale and financial industries, where downsizing and use of client/server systems on an enterprise wide basis are important, could also provide opportunities. Since SAP software has many non manufacturing functions, it can be used in a variety of industries. Sales activities should address opportunities in many industries as the key vendors, and particularly Andersen, are doing.

Users stress that vendors should have a full range of consulting and development services in support of SAP software, and key support vendors report that they have full support or are trying to fill gaps in service.

III. Information from Key SAP Support Providers

Information from the support providers is provided in two sets of exhibits that follow. The first set contains the answers to questions listed in Section I, in order by support vendor. The second set has the information sorted by question, so that the answers from all four vendors can be compared for that question.

The information is based on reports from fully implemented installations. (Forty percent of users surveyed said their installations were not fully implemented.) It is also based upon the viewpoint of vendor contacts, who made judgements on industries, locations and what was fully installed.

Key Questions	Andersen Consulting
Installation Distribution	
Geography	
R/2	
Europe & Africa	25
Asia/Pacific	7
Other	12
United States	30
R/3	
Europe & Africa	22
Asia/Pacific	14
Other	8
United States	22
Vertical Markets	
R/2	
Chemicals	4
Consumer Goods	21
High Technology	20
Oil & Gas	9
Pharmaceuticals/Health Care	10
R/3	
Chemicals	7
Consumer Goods	21
High Technology	19
Oil & Gas	4
Pharmaceuticals/Health Care	10
Financial	2
Government	
Public Utilities	2
Entertainment/Media	1
High Profile Clients	See Attached
Market Share	
R/2	10%
R/3	17%
Project Status (In-progress)	12%
Geography	
U.S.	23%
International	27%

Key Questions	Andersen Consulting
Services (E.g., design, integration, modification, installation, support)	• Andersen Consulting is a full-service provider for SAP implementations. • They note their abilities in the front-end planning and design (with higher billable rates) and can work with clients who want to participate actively in the implementation. That is, Andersen and the client may share project management roles and the client may supply more of the workers. (These workers will, most likely, be trained by Andersen.)
Does vendor plan to fill service gaps?	• Vendor has no service gaps, but to avoid these gaps they may need to temporarily relocate people. To avoid that, and to garner higher billable rates, more consultants are being trained in more areas of SAP implementations.
Marketing and sales process	
Is there a dedicated SAP sales force?	• No. Each region is responsible for their own sales.
How are leads generated and followed up?	• Vendor's image and recognition, in addition to national and international advertising in major business publications (e.g., their Best Practices ads in Business Week) draw many responses. • Leads are followed up by SAP Practice Partners in each region.
Are standard proposal templates used?	• Yes, although vendor seeks to customize each to add value when they have the opportunity.
What pricing approaches are used?	• Time and materials and fixed price are used, depending on the services offered and the extent to which project unknowns are quantifiable. Note: SAP's product portion averages $1M.)
What are the relationships with hardware vendors?	• Andersen has extensive relationships with all major hardware vendors, sharing technical information and, through their Technical Competence Centers, working jointly on hardware/software interface issues.
What is a typical SAP engagement?	• Projects are very complex; it is not easy to install SAP. Andersen confirms that "typical" projects usually last 12-18 months and involve up to 12 people.
Are standard process models used?	• Electronic templates are available for key industries, including discrete manufacturing, chemicals, electronics, and consumer goods. They also have a full set of business processes documented and, for R/3, pre-configured data tables.

Key Questions	Andersen Consulting
What development tools are used?	• Andersen has an SAP implementation model, based on their packaged software methodology, that self-documents the project as it is being designed by the team. They use this tool to demonstrate their approach, share tips and ideas from other implementations, and capture the unique issues of the client.
Number of consultants who are experienced in SAP?	• Approximately 800 experienced consultants (actual project work), many of these in the U.S. working on R/3 projects.
How are they rated or classified?	• Andersen ultimately classifies workers according to the billable rates they can command. The number of actual SAP projects completed is a key criterion, followed by the amount and type of training.
To what extent is the experience derived from formal training vs OJT?	• All consultants have had formal training and most have or are getting on-the-job experience. Also, experiential knowledge is shared via a corporate-wide network using Lotus Notes (called Knowledge Exchange). Andersen plans to train another 1,100 consultants in the U.S. over the next 8 months.
Do suppliers use "centers of excellence" or analogous units?	• Andersen has moved away from the COE to their own Regional Competence Centers.
How are they utilized?	• The regional centers are used as a venue for exchange among SAP, Andersen, and the client. For example, these three parties might do joint resource planning at the center or exchange information specific to the client. • Each center is managed by an Andersen consultant responsible for the relationship with SAP for that region.
What does SAP contribute?	See above.
What is SAP's strategy and approach in working with service providers?	• SAP very non-committal on vendor criteria or qualifications. SAP personnel would only state that named vendors were qualified and that non-SAP issues should prevail. • SAP offers a Partner Alliance, complete with awards for customer satisfaction. This program has both contractual and marketing components.

Key Questions	Andersen Consulting
What does firm see as special strengths?	• Worldwide presence • The ability to field strong teams throughout the U.S. • A repository of best practices (i.e., pre-configured SAP software) that is the result of a previous client's implementation plus added value from Andersen. • The ability to get a rapid implementation through use of their pre-configured software templates. • A strong education practice throughout the firm, some of which is focused on SAP.
Who do they believe are their competitors?	• Andersen mentions the Big Six; They also feel companies such as ICS are in a different business.
Plans to change approach or offerings?	• Thrust is on developing more industry templates and increasing the number of consultants qualified at higher billable rates.

High Profile Clients of Andersen Consulting

High Profile Clients	Geography	Vertical Market	Business Unit(s)	Status of Project
Colgate	U.S.	Consumer Goods	Fin., Mfg., Dist.	In progress
Exxon	U.S.	Oil & Gas	Dist.	Completed
Apple Computer	U.S.	High Tech	Fin., Mfg., Dist., HR	Completed
Foothills Pipeline	U.S.	Oil & Gas	Dist.	Completed
DRT	Europe	Manufacturing	Mfg.	Completed
Warren Petroleum	U.S.	Oil & Gas	Dist.	Completed
Ciba Geigy	U.S.	Chemicals	Mfg.,	In progress
Royal LePage	Europe	Business Services	Fin., HR	Completed
Shindler Elevator	U.S.	Manufacturing	Mfg.	Completed
Schering-Plough	U.S.	Pharmaceuticals	Mfg.	Completed
Foxmeyer	U.S.	Distribution	Fin.	In progress

Key Questions	Deloitte Touche
Installation Distribution	
Geography	
R/2	
Europe & Africa	18
Asia/Pacific	2
Other	8
United States	17
R/3	
Europe & Africa	13
Asia/Pacific	2
Other	3
United States	10
Vertical Markets	
R/2	
Chemicals	13
Consumer Goods	14
High Technology	7
Oil & Gas	8
Pharmaceuticals/Health Care	2
R/3	
Chemicals	7
Consumer Goods	14
High Technology	6
Oil & Gas	5
Pharmaceuticals/Health Care	5
Financial	
Government	
Public Utilities	
Entertainment/Media	
High Profile Clients	See Attached
Market Share	
R/2	6%
R/3	7%
Project Status (In-progress)	8%
Geography	
U.S.	14%
International	17%

Key Questions	Deloitte Touche
Services (E.g., design, integration, modification, installation, support)	• Vendor has full-service capabilities. Many engagements, however, seem focused on up-front planning.
Does vendor plan to fill service gaps?	• Plans are focused on developing COEs for other industries and moving their skills in enabling technologies to SAP implementations.
Marketing and sales process	
Is there a dedicated SAP sales force?	• No. Each region has SAP Practice Managers responsible for selling.
How are leads generated and followed up?	• Leads mostly generated internally by other consultants.
Are standard proposal templates used?	• Yes, to initiate an engagement. Then vendor prepares a "strawman" planning document for the actual project.
What pricing approaches are used?	• Pricing depends on the services to be provided: full-service is fixed and individual services tend to be time and materials.
What are the relationships with hardware vendors?	• Vendor has relationships with IBM, Hewlett-Packard, Digital, and Sun for the supply of hardware to SAP projects. Sharing of technical information is most frequent activity.

What is a typical SAP engagement?	• Typical project takes 1-1.5 years. Critical path functions for a "typical" implementation are:
	  • Scoping 4-6 weeks
	  • As-Is Model 4-8 weeks
	  • Reengineering 12-18 weeks
	  • Core Prototyping 20-28 weeks
	  • Pilot & Imp. 12-20 weeks
	• Typical Staffing:
	  • Resource Client External
	  • Proj Mgr. 1 1
	  • Integrator 1 .5
	  • Funct. Teams 14-20 3-4
	  • Tech. Integ. 1
	  • Support 3-5 1
	  • Total 20-28 6-7

Are standard process models used?	• Vendor has wrapped SAP inside their life cycle methodology. • They have industry templates for chemicals, process and discrete manufacturing, packaged goods, and others.

Key Questions	Deloitte Touche
What development tools are used?	• They provide tools for scripting, prototyping, etc. • 4FRONT is their SAP implementation methodology; in includes tools for project scoping and planning, business process redesign, prototyping and implementation. • Analyzer tool is incorporated in the implementation methodology.
Number of consultants who are experienced in SAP?	• 300 in North America, 100 in Europe, 40 in Africa, and 50 in Asia/Pacific (includes Australia)
How are they rated or classified?	• Most are rated by the amount of experience (industry and SAP) they have (most are European) and, secondarily, their ability to be a "good" overall consultant.
To what extent is the experience derived from formal training vs OJT?	• Vendor offers a 6-8 week in-house training program, but mostly hires experienced people. • Vendor finds it easy to transport experience from project to project.
Do suppliers use "centers of excellence" or analogous units?	• Yes. Vendor uses the COE as a centerpiece of their qualification. This is D&T's only major software vendor relationship. • In 1994 they established the Consumer Packaged Goods COE as well as the High Tech COE and a Global COE.
How are they utilized?	• D&T's COE is a central hub for all SAP activities, including product/program management, implementation methodology, marketing/client services, practice coordination, recruiting and training, technology and alliance relationships, and engagement staffing.
What does SAP contribute?	• SAP's Center of Expertise offers access to broad functional skills, industry-specific experience, and SAP-specific training in their implementation methodology and ImplementationWare (IMW) tool. • SAP also offers an SAP Advisory Team to D&T' s COE.
What is SAP's strategy and approach in working with service providers?	See comments elsewhere
What does firm see as special strengths?	• One of four winners of Award of Excellence, a customer satisfaction survey sponsored by SAP. • Claims to provide more senior-level personnel on SAP projects; vendor claims other vendors have a 1:6 ratio while they have a 1:3 ratio. • Experience with implementing SAP, especially configuration and technical assistance through the COE.
Who do they believe are their competitors?	• D&T mentioned Price Waterhouse.

Key Questions	Deloitte Touche
Plans to change approach or offerings?	• Near-term focus is on growing the business as it currently exists, especially in expanding the COE and enhancing D&T's ability to find and attract experienced SAP consultants.

High Profile Clients of Deloitte & Touche

High Profile Clients	Geography	Vertical Market	Business Unit(s)	Status of Project
Albemarle	United States	Chemicals	Fin., Dist.	In progress
American Cyanamid	United States	Agricultural Chemicals	Dist.,	In progress
Andrew Corporation	United States	Electronics	Sales, Dist.	Completed
Berlex Laboratories	United States	Pharmaceuticals	Fin., Dist., Mfg., HR	In progress
Cadbury Schweppes	United States	Food/Consumer Products	Fin., Dist.	In planning
Cooper Oil Tool	United States	Oil & Gas	Fin.	Completed
Digital Equipment	United States	High Technology	Fin., Sales, Dist., Mfg.	In progress
Dow Chemical	United States	Chemicals	Mfg.	Completed
Goodyear	United States	Automotive	Dist.	In progress
Haarmann & Reimer (Miles)	United States	Chemicals	Mfg.	On-going
Heinz	Canada	Food/Consumer Products	Sales, Dist.	In progress
Hitachi Data Systems	United States	Electronics	Mfg.	Completed
Hubbell	United States	Electronics	Fin.	Completed
Hunt-Wesson	United States	Food/Consumer Products	Multiple (BPR)	In progress
Kyocera	United States	Electronics	Sales., Dist., Mfg., Fin.	In progress
Landmark Graphics	United States	Software	Fin., Sales., Dist., Mfg.	In progress
Marion Merrell Dow	United States	Pharmaceuticals	Mfg.	In progress
Merisel	United States	Distribution	Sales, Dist., Fin.	Completed
Mitsubishi	United States	Manufacturing	Fin., Sales, Dist.	In progress
Monsanto	United States	Chemicals	Dist.	In planning
Nestle	United States	Food/Consumer Products	Fin.,	Completed
Petro Canada	Canada	Chemicals	Mfg., Sales, Dist.	In progress
Schering-Plough	United States	Pharmaceuticals	Dist., Fin., Mfg.	In progress
Steelcase	United States	Office Products	Sales, Dist.	Completed
Syntex	United States	Pharmaceuticals	Multiple (BPR)	Completed

Key Questions	International Consulting Solutions
Installation Distribution	
Geography	
R/2	Minimal R/2 activity, but in these industries:
Europe & Africa	X
Asia/Pacific	
Other	X
United States	X
R/3	
Europe & Africa	4
Asia/Pacific	0
Other	1
United States	11
Vertical Markets	
R/2	Minimal R/2 activity
Chemicals	X
Consumer Goods	X
High Technology	X
Oil & Gas	X
Pharmaceuticals/Health Care	
R/3	
Chemicals	2
Consumer Goods	6
High Technology	5
Oil & Gas	
Pharmaceuticals/Health Care	3
Financial	
Government	
Public Utilities	
Entertainment/Media	
High Profile Clients	See Attached
Market Share	
R/2	Minimal R/2 business
R/3	3%
Project Status (In-progress)	4%
Geography	
U.S.	8%
International	2%

Key Questions	International Consulting Solutions
Services (E.g., design, integration, modification, installation, support)	• Vendor provides most services, but specializes on the technical issues of integration. Their approach is more one of "body shop" than "full service."
Does vendor plan to fill service gaps?	• Current plans are to focus on software add-ons, first, and develop full-service capabilities as opportunities arise. • ICS does have a relationship with ARMS, a NJ-based systems integrator specializing in data collection systems.
Marketing and sales process	
Is there a dedicated SAP sales force?	• No. Sales is managed by the two regional managers and is supported by a Partner in charge of Sales and Marketing.
How are leads generated and followed up?	• Some leads from SAP.
Are standard proposal templates used?	• No. Vendors' limited experience and "body shop" format requires more customized proposals.
What pricing approaches are used?	• Generally, time and materials for services. Products are fixed price. Cost-plus is an option infrequently used.
What are the relationships with hardware vendors?	• Vendor has no strong links to any hardware vendors.
What is a typical SAP engagement?	• Engagements are usually "body shop;" consulting, bundled software, database, implementation, and financing. • Client training for knowledge transfer is a key offering.
Are standard process models used?	• • Generally no. Vendor is developing the experience to support standard models. Note, however, their product offering in distribution.
What development tools are used?	• ICS offers Universal Portable Interface for all SAP platforms. UCP provides a consistent interface to EDI and non-EDI requirements. • ICS FastTrack is an implementation system for project scoping and planning, assessment and configuration, core configuration, fine-tuning, testing and system delivery. Issue Management is a tool used to analyze and solve issues which are called out into a database. • ARIS-Toolset (an SAP-supported, IDS-developed product) is a business modeling tool that employs industry-specific built-in business models. It is a part of FastTrack. ICS is a value-added reseller of IDS' ARIS in Mexico, plans to expand this relationship to Europe and the Far East, and is working with IDS on the

Key Questions	International Consulting Solutions
	development of future products.
Number of consultants who are experienced in SAP?	• 404 in the world, mostly in the U.S.
How are they rated or classified?	• SAP background is key. Also ICS looks for employees who share their core beliefs for customer satisfaction and are dedicated to finding new ways to make SAP perform more efficiently.
To what extent is the experience derived from formal training vs OJT?	• ICS relies mostly on previous experience, but does offer training on ICS-specific methodologies and tools.
Do suppliers use "centers of excellence" or analogous units?	• No, but ICS is a certified SAP partner.
How are they utilized?	
What does SAP contribute?	• SAP uses Intel's ProShare videoconferencing to provide interactive, face-to-face support, especially to customers. • Vendor can also use the Jumpstart program that allows customers to send project teams to SAP for training.
What is SAP's strategy and approach in working with service providers?	See comments elsewhere
What does firm see as special strengths?	• OpenScan/1 is a software add-on to SAP software that integrates goods movement information with SAP using data collection and radio frequency technology. • ICS feels their history with SAP (4 founders were consultants with SAP for some time) and their exclusive focus on SAP are both assets. • they also tout their "fast and easy" implementations and quick knowledge transfer (limiting "long-term client dependency")
Who do they believe are their competitors?	• Big Six
Plans to change approach or offerings?	• No plans to move from software add-ons, expanding service offerings slowly, and enhancing relationships with key integrators.

High Profile Clients of International Consulting Solutions

High Profile Clients	Geography	Vertical Market	Business Unit(s)	Status of Project
Applied Materials	United States	Manufacturing	Mfg.	In progress
AST Research	United States	High Tech	Dist.	In progress
Autodesk	United States	High Tech	Dist.	In progress
Ciba Geigy (4 divisions)	Europe & Africa, U.S.	Chemicals	Mfg., Dist.	In progress
Convex Computer	United States	High Tech	Dist.	In progress
Cott Beverages	United States	Foods/Consumer Goods	Dist.	In progress
DEC	United States	High Tech	Fin.	In progress
James River	United States	Manufacturing	Pur., Dist.	In progress
Lennox	United States	Manufacturing	Mfg.	In progress
Merisel	United States	Distribution	Sales, Dist.	In progress
Motorola	United States	Manufacturing	Info. Tech. (Network)	In progress
Nestle	Europe & Africa	Foods/Consumer Goods	Sales, Mfg.	In progress
Petro Canada	Canada	Chemicals	Fin.	In progress
Philip Morris	United States	Foods/Consumer Goods	Dist.	In progress
Seattle Times	United States	Manufacturing	Dist.	completed
St. Lawrence Cement	Canada	Manufacturing	Mfg.	In progress

Key Questions	Price Waterhouse
Installation Distribution	
Geography	
R/2	
Europe & Africa	23
Asia/Pacific	8
Other	10
United States	20
R/3	
Europe & Africa	17
Asia/Pacific	10
Other	6
United States	17
Vertical Markets	
R/2	
Chemicals	12
Consumer Goods	16
High Technology	18
Oil & Gas	7
Pharmaceuticals/Health Care	8
R/3	
Chemicals	5
Consumer Goods	18
High Technology	17
Oil & Gas	2
Pharmaceuticals/Health Care	8
Financial	New market focus, installs in progress
Government	New market focus, installs in progress
Public Utilities	New market focus, installs in progress
Entertainment/Media	New market focus, installs in progress
High Profile Clients	See Attached

Key Questions	Price Waterhouse
Market Share	
R/2	8%
R/3	13%
Project Status (In-progress)	18%
Geography	
U.S.	• 17% of U.S. market. Vendor is stronger on the East coast, primarily because that's where their imported (European) talent resides. This region (Philadelphia to Florida) is where the practice started in 1988.
International	19%
Services (E.g., design, integration, modification, installation, support)	• Vendor is only accepting jobs that are full service. They offer an SAP implementation lifecycle consisting of, using their terms, analysis (scoping, project team training, data planning), design (prototyping and specification), construction (customization, interfaces, environment, training, testing), and implementation.
Does vendor plan to fill service gaps?	• Vendor offers a full service and plans to continue this strategy, reducing work for clients with limited service needs.
Marketing and sales process	
Is there a dedicated SAP sales force?	• No. Sales are the responsibility of the SAP Practice Manager in each region (Northeast, Southeast, Great Lakes, Central, and West)
How are leads generated and followed up?	• Leads are generally created internally, although there is some amount of "blue birds." Company is very selective in that they look for full-service partnering opportunities in their target industries and in geographic areas where they have resources available.
Are standard proposal templates used?	• Vendor tries to standardize but reports that rapid changes in their offerings makes this very difficult.
What pricing approaches are used?	• Prefers fixed price for full SAP implementations but does work on time and materials in areas of many unknowns (e.g., original development work).
What are the relationships with hardware vendors?	• Vendor works with all types of equipment; HP, IBM, and DEC were specifically mentioned. • Only vendor to offer "turnkey" solution.
What is a typical SAP engagement?	• Most projects involve 200-300 end users; they do have one site with 1,000 users and several under way in the 3,000-5,000 range. • Vendor notes that typical projects can have a run rate of $20,000/day with a duration of 12-18 months.

Key Questions	Price Waterhouse
Are standard process models used?	• Vendor has developed a number of industry templates, pre-configured, functioning implementation, including common practices and terminology.
What development tools are used?	• Vendor has adapted their packaged software methodology to the SAP product. They also offer an R/3 Toolkit of application software to accelerate implementation of R/3 in client-server environments. • Vendor also employs their Change Integration and Business Process Transformation methodologies as an umbrella approach. These latter two are usually a part of larger reengineering efforts.
Number of consultants who are experienced in SAP?	• Over 500 worldwide with 386 in the U.S., up from 16 when they started in 1988.
How are they rated or classified?	• Employees classified by seniority; SAP employees have 1-15 years of SAP experience.
To what extent is the experience derived from formal training vs OJT?	• Vendor provides own six weeks training program (they did use SAP's school, but pulled out years ago). They plan to invest $3M to train 200 SAP specialists and give another 200 an SAP overview. • They also run IT Knowledgenet using Lotus Notes. There are six SAP Design Centers around the U.S. that share information. Employees also have access to the corporate R&D Center information in Menlo Park, CA. Finally, a group in Bethesda, MD looks at performance and technology issues a number of technologies.
Do suppliers use "centers of excellence" or analogous units?	• Vendor was part of a joint venture with SAP for the Center of Expertise in Philadelphia but is now out of that effort. • Vendor prefers referencable accounts but all of them are either in development or are undersized for prospective customers. • Vendor does have an R/3 Design Center in Santa Monica, CA for prototyping SAP software.
How are they utilized?	• R&D center participates in beta tests for SAP. They also converted SAP to Japanese. These relationships are made clear in sales literature and presentations.
What does SAP contribute?	• See above.
What is SAP's strategy and approach in working with service providers?	• SAP offers a Partner Alliance, complete with awards for customer satisfaction. This program has both contractual and marketing components.

Key Questions	Price Waterhouse
What does firm see as special strengths?	• Understanding of and ability to implement underlying architectures. • Also, vendor believes that they are able to field stronger teams. • Worldwide presence. • Vendor won the 1994 SAP Award of Excellence. • The Design Centers provide rapid SAP implementations through industry-specific templates. These centers also offer benchmarking, R/2 and R/3 connectivity, DE, and technical platform characteristics and capabilities.. • Only Big Six to be a Certified SAP trainer.
Who do they believe are their competitors?	• Andersen Consulting and ICS
Plans to change approach or offerings?	• Vendor may develop approaches to migrate R/2 users to R/3, a problem that could take SAP at least five years to solve. • Also, more stringent project selection criteria to target full-service projects with add-on opportunities.

High Profile Clients of Price Waterhouse

High Profile Clients	Geography	Vertical Market	Business Unit(s)	Status of Project
DuPont	U.S.	Chemicals	Fin., Mfg., Dist., HR	R/2 completed, R/3 begun
General Mills	U.S.	Consumer Goods	Mfg., Dist.	Completed
Hercules	U.S.	Chemicals	Fin., Mfg., Dist., HR	Completed
BMW	U.S.	Consumer Goods	HR	Completed
BOSE	U.S.	Consumer Goods	Fin., Mfg., Dist.	Completed
Coors	U.S.	Consumer Goods	Dist.	Completed
Intel	U.S.	Electronics	Mfg., Dist.	In progress
M/A-COM	U.S.	Manufacturing	Fin., Mfg., Dist.	Completed
SAIC	U.S.	Manufacturing	Mfg.	Completed
Mobil Oil	Australia	Oil & Gas	Mfg.	Completed
Siemens	Germany	Manufacturing	Mfg., HR	Completed
Kodak	UK	Chemicals	Fin., Mfg., Dist.	Completed
SAP	South America	Software	Distribution	Completed
BASF	Asia/Pacific	Chemicals	Fin., Mfg., Dist.	Completed
Hoechst	Japan	Chemicals	Manufacturing	Completed
Bristol-Myers Squibb	U.S.	Pharmaceuticals	Fin.	In progress
Merck	U.S.	Pharmaceuticals	Fin., Dist., HR	In progress

Key Questions	Andersen Consulting	Deloitte Touche	International Consulting Solutions	Price Waterhouse
Installation Distribution				
Geography				
R/2			Minimal R/2 activity, but in these industries:	
Europe & Africa	25	18	X	23
Asia/Pacific	7	2		8
Other	12	8	X	10
United States	30	17	X	20
R/3				
Europe & Africa	22	13	4	17
Asia/Pacific	14	2	0	10
Other	8	3	1	6
United States	22	10	11	17
Vertical Markets				
R/2			Minimal R/2 activity	
Chemicals	4	13	X	12
Consumer Goods	21	14	X	16
High Technology	20	7	X	18
Oil & Gas	9	8	X	7
Pharmaceuticals/Health Care	10	2		8

Key Questions	Andersen Consulting	Deloitte Touche	International Consulting Solutions	Price Waterhouse
R/3				
Chemicals	7	7	2	5
Consumer Goods	21	14	6	18
High Technology	19	6	5	17
Oil & Gas	4	5		2
Pharmaceuticals/Health Care	10	5	3	8
Financial	2			New market, installs in progress
Government				New market, installs in progress
Public Utilities	2			New market, installs in progress
Entertainment/Media	1			New market, installs in progress
High Profile Clients	See Attached			

Key Questions	Andersen Consulting	Deloitte Touche	International Consulting Solutions	Price Waterhouse
Market Share				
R/2	10%	6%	Minimal R/2 business	8%
R/3	17%	7%	3%	13%
Project Status (In-progress)	12%	8%	4%	18%
Geography				
U.S.	23%	14%	8%	17% Vendor is stronger on the East coast, primarily because that's where their imported (European) talent resides. This region (Philadelphia to Florida) is where the practice started in 1988.
International	27%	17%	2%	19%

Key Questions	Andersen Consulting	Deloitte Touche	International Consulting Solutions	Price Waterhouse
Services (E.g., design, integration, modification, installation, support)	Andersen Consulting is a full-service provider for SAP implementations. They note their abilities in the front-end planning and design (with higher billable rates) and can work with clients who want to participate actively in the implementation. That is, Andersen and the client may share project management roles and the client may supply more of the workers. (These workers will, most likely, be trained by Andersen.)			Vendor is only accepting jobs that are full service. They offer an SAP implementation lifecycle consisting of, using their terms, analysis (scoping, project team training, data planning), design (prototyping and specification), construction (customization, interfaces, environment, training, testing), and implementation.
Does vendor plan to fill service gaps?	Vendor has no service gaps, but to avoid these gaps they may need to temporarily relocate people. To avoid that, and to garner higher billable rates, more consultants are being trained in more areas of SAP implementations.	Vendor has full-service capabilities. Plans are focused on developing COEs for other industries and moving their skills in enabling technologies to SAP implementations.	Current plans are to focus on software add-ons, first, and develop full-service capabilities as opportunities arise. ICS does have a relationship with ARMS, a NJ-based systems integrator specializing in data collection systems.	Vendor offers a full service and plans to continue this strategy, reducing work for clients with limited service needs.

Key Questions	Andersen Consulting	Deloitte Touche	International Consulting Solutions	Price Waterhouse
Marketing and sales process				
Is there a dedicated SAP sales force?	No. Each region is responsible for their own sales.	No. Each region has SAP Practice Managers responsible for selling.	No. Sales is managed by the two regional managers and is supported by a Partner in charge of Sales and Marketing.	No. Sales are the responsibility of the SAP Practice Manager in each region (Northeast, Southeast, Great Lakes, Central, and West)
How are leads generated and followed up?	Vendor's image and recognition, in addition to national and international advertising in major business publications (e.g., their Best Practices ads in Business Week) draw many responses. Leads are followed up by SAP Practice Partners in each region.	Leads mostly generated internally by other consultants.	Some leads from SAP.	Leads are generally created internally, although there is some amount of "blue birds." Company is very selective in that they look for full-service partnering opportunities in their target industries and in geographic areas where they have resources available.
Are standard proposal templates used?	Yes, although vendor seeks to customize each to add value when they have the opportunity.	Yes, to initiate an engagement. Then vendor prepares a "strawman" planning document for the actual project.	No. Vendors' limited experience and "body shop" format requires more customized proposals.	Vendor tries to standardize but reports that rapid changes in their offerings makes this very difficult.

Key Questions	Andersen Consulting	Deloitte Touche	International Consulting Solutions	Price Waterhouse
What pricing approaches are used?	Time and materials and fixed price are used, depending on the services offered and the extent to which project unknowns are quantifiable. (Note: SAP's product portion averages $1M.)	Pricing depends on the services to be provided: full-service is fixed and individual services tend to be time and materials.	Generally, time and materials for services. Products are fixed price. Cost-plus is an option infrequently used.	Prefers fixed price for full SAP implementations but does work on time and materials in areas of many unknowns (e.g., original development work).
What are the relationships with hardware vendors?	Andersen has extensive relationships with all major hardware vendors, sharing technical information and, through their Technical Competence Centers, working jointly on hardware/software interface issues.	Vendor has relationships with IBM, Hewlett-Packard, Digital, and Sun for the supply of hardware to SAP projects. Sharing of technical information is most frequent activity.	Vendor has no strong links to any hardware vendors.	Vendor works with all types of equipment; HP, IBM, and DEC were specifically mentioned. Only vendor to offer "turnkey" solution.

Key Questions	Andersen Consulting	Deloitte Touche	International Consulting Solutions	Price Waterhouse
What is a typical SAP engagement?	Projects are very complex; it is not easy to install SAP. Andersen confirms that "typical" projects usually last 12-18 months and involve up to 12 people.	Typical project takes 1-1.5 years. Critical path functions for a "typical" implementation are: Scoping 4-6 weeks As-Is Model 4-8 weeks Reengineering 12-18 weeks Core Prototyping 20-28 weeks Pilot & Imp. 12-20 weeks Typical Staffing: Resource Client External Proj Mgr. 1 1 Integrator 1 .5 Funct. Teams 14-20 3-4 Tech. Integ. 1 Support 3-5 1 Total 20-28 6-7	Engagements are usually "body shop;" consulting, bundled software, database, implementation, and financing. Client training for knowledge transfer is a key offering.	Most projects involve 200-300 end users; they do have one site with 1,000 users and several under way in the 3,000-5,000 range. Vendor notes that typical projects can have a run rate of $20,000/day with a duration of 12-18 months.
Are standard process models used?	Electronic templates are available for key industries, including discrete manufacturing, chemicals, electronics, and consumer goods. They also have a full set of business processes documented and, for R/3, pre-configured data tables.	Vendor has wrapped SAP inside their life cycle methodology. They have industry templates for chemicals, process and discrete manufacturing, packaged goods, and others.	Generally no. Vendor is developing the experience to support standard models. Note, however, their product offering in distribution.	Vendor has developed a number of industry templates, pre-configured, functioning implementation, including common practices and terminology.

Key Questions	Andersen Consulting	Deloitte Touche	International Consulting Solutions	Price Waterhouse
What development tools are used?	Andersen has an SAP implementation model, based on their packaged software methodology, that self-documents the project as it is being designed by the team. They use this tool to demonstrate their approach, share tips and ideas from other implementations, and capture the unique issues of the client.	They provide tools for scripting, prototyping, etc. 4FRONT is their SAP implementation methodology; in includes tools for project scoping and planning, business process redesign, prototyping and implementation. R/3 Analyzer tool is incorporated in the implementation methodology.	ICS offers Universal Portable Interface for all SAP platforms. UCP provides a consistent interface to EDI and non-EDI requirements. ICS FastTrack is an implementation system for project scoping and planning, assessment and configuration, core configuration, fine-tuning, testing and system delivery. Issue Management is a tool used to analyze and solve issues which are called out into a database. ARIS-Toolset (an SAP-supported, IDS-developed product) is a business modeling tool that employs industry-specific built-in business models. It is a part of FastTrack. ICS is a value-added reseller of IDS' ARIS in Mexico, plans to expand this relationship to Europe and the Far East, and is working with Ids on the development of future products.	Vendor has adapted their packaged software methodology to the SAP product. They also offer an R/3 Toolkit of application software to accelerate implementation of R/3 in client-server environments. Vendor also employs their Change Integration and Business Process Transformation methodologies as an umbrella approach. These latter two are usually a part of larger reengineering efforts.

Key Questions	Andersen Consulting	Deloitte Touche	International Consulting Solutions	Price Waterhouse
Number of consultants who are experienced in SAP?	Approximately 800 experienced consultants (actual project work), many of these in the U.S. working on R/3 projects.	490: 300 in North America, 100 in Europe, 40 in Africa, and 50 in Asia/Pacific (includes Australia)	404 in the world, mostly in the U.S.	Over 500 worldwide with 386 in the U.S., up from 16 when they started in 1988.
How are they rated or classified?	Andersen ultimately classifies workers according to the billable rates they can command. The number of actual SAP projects completed is a key criterion, followed by the amount and type of training.	Most are rated by the amount of experience (industry and SAP) they have (most are European) and, secondarily, their ability to be a "good" overall consultant.	SAP background is key. Also ICS looks for employees who share their core beliefs for customer satisfaction and are dedicated to finding new ways to make SAP perform more efficiently.	Employees classified by seniority; SAP employees have 1-15 years of SAP experience.

Key Questions	Andersen Consulting	Deloitte Touche	International Consulting Solutions	Price Waterhouse
To what extent is the experience derived from formal training vs OJT?	All consultants have had formal training and most have or are getting on-the-job experience. Also, experiential knowledge is shared via a corporate-wide network using Lotus Notes (called Knowledge Exchange). Andersen plans to train another 1,100 consultants in the U.S. over the next 8 months.	Vendor offers a 6-8 week in-house training program, but mostly hires experienced people. Vendor finds it easy to transport experience from project to project.	ICS relies mostly on previous experience, but does offer training on ICS-specific methodologies and tools.	Vendor provides own six weeks training program (they did use SAP's school, but pulled out years ago). They plan to invest $3M to train 200 SAP specialists and give another 200 an SAP overview. They also run IT Knowledgenet using Lotus Notes. There are six SAP Design Centers around the U.S. that share information. Employees also have access to the corporate R&D Center information in Menlo Park, CA. Finally, a group in Bethesda, MD looks at performance and technology issues a number of technologies.

Key Questions	Andersen Consulting	Deloitte Touche	International Consulting Solutions	Price Waterhouse
Do suppliers use "centers of excellence" or analogous units?	Andersen has moved away from the COE to their own Regional Competence Centers.	Yes. Vendor uses the COE as a centerpiece of their qualification. This is D&T's only major software vendor relationship. In 1994 they established the Consumer Packaged Goods COE as well as the High Tech COE and a Global COE.	No, but ICS is a certified SAP partner.	Vendor was part of a joint venture with SAP for the Center of Expertise in Philadelphia but is now out of that effort. Vendor prefers referencable accounts but all of them are either in development or are undersized for prospective customers. Vendor does have an R/3 Design Center in Santa Monica, CA for prototyping SAP software.
How are they utilized?	The regional centers are used as a venue for exchange among SAP, Andersen, and the client. For example, these three parties might do joint resource planning at the center or exchange information specific to the client. Each center is managed by an Andersen consultant responsible for the relationship with SAP for that region.	D&T's COE is a central hub for all SAP activities, including product/program management, implementation methodology, marketing/client services, practice coordination, recruiting and training, technology and alliance relationships, and engagement staffing.		R&D center participates in beta tests for SAP. They also converted SAP to Japanese. These relationships are made clear in sales literature and presentations.

Key Questions	Andersen Consulting	Deloitte Touche	International Consulting Solutions	Price Waterhouse
What does SAP contribute?	See above.	SAP's Center of Expertise offers access to broad functional skills, industry-specific experience, and SAP-specific training in their implementation methodology and ImplementationWare (IMW) tool. SAP also offers an SAP Advisory Team to D&T' s COE.	SAP uses Intel's ProShare videoconferencing to provide interactive, face-to-face support, especially to customers. Vendor can also use the Jumpstart program that allows customers to send project teams to SAP for training.	See above.
What is SAP's strategy and approach in working with service providers?	SAP very non-committal on vendor criteria or qualifications. SAP personnel would only state that named vendors were qualified and that non-SAP issues should prevail. SAP offers a Partner Alliance, complete with awards for customer satisfaction. This program has both contractual and marketing components.			

Key Questions	Andersen Consulting	Deloitte Touche	International Consulting Solutions	Price Waterhouse
What does firm see as special strengths?	Worldwide presence The ability to field strong teams throughout the U.S. A repository of best practices (i.e., pre-configured SAP software) that is the result of a previous client's implementation plus added value from Andersen. The ability to get a rapid implementation through use of their pre-configured software templates. A strong education practice throughout the firm, some of which is focused on SAP.	One of four winners of Award of Excellence, a customer satisfaction survey sponsored by SAP. Claims to provide more senior-level personnel on SAP projects; vendor claims other vendors have a 1:6 ratio while they have a 1:3 ratio. Experience with implementing SAP, especially configuration and technical assistance through the COE.	OpenScan/1 is a software add-on to SAP software that integrates goods movement information with SAP using data collection and radio frequency technology. ICS feels their history with SAP (4 founders were consultants with SAP for some time) and their exclusive focus on SAP are both assets. they also tout their "fast and easy" implementations and quick knowledge transfer (limiting "long-term client dependency")	Understanding of and ability to implement underlying architectures. Also, vendor believes that they are able to field stronger teams. Worldwide presence. Vendor won the 1994 SAP Award of Excellence. The Design Centers provide rapid SAP implementations through industry-specific templates. These centers also offer benchmarking, R/2 and R/3 connectivity, DE, and technical platform characteristics and capabilities.. Only Big Six to be a Certified SAP trainer.
Who do they believe are their competitors?	Andersen mentions the Big Six; They also feel companies such as ICS are in a different business.	D&T mentioned Price Waterhouse.	Big Six	Andersen Consulting and ICS

Key Questions	Andersen Consulting	Deloitte Touche	International Consulting Solutions	Price Waterhouse
Plans to change approach or offerings?	Thrust is on developing more industry templates and increasing the number of consultants qualified at higher billable rates.	Near-term focus is on growing the business as it currently exists, especially in expanding the COE and enhancing D&T's ability to find and attract experienced SAP consultants.	No plans to move from software add-ons, expanding service offerings slowly, and enhancing relationships with key integrators.	Vendor may develop approaches to migrate R/2 users to R/3, a problem that could take SAP at least five years to solve. Also, more stringent project selection criteria to target full-service projects with add-on opportunities.

IV. Information from User Survey

A. Summary Information

A brief summary of information is shown since the exhibits that follow provide the information in more detail.

Assignments are long. R2 assignments involved an average decision time of 5.3 months and an implementation time of 14 months. R3 assignments had a decision time of 8.6 months and an implementation time of 17.2 months.

The four key vendors were reported to have the largest number of assignments among the 30 users interviewed. Andersen was used alone or as part of a team, 9 times. ICS and PW were each used 6 times as the sole vendor or on a team. D&T was mentioned 3 times as part of teams. In 2 other cases, SAP contracted with D&T to provide some aid.

Reengineering was done by support vendors in 43% of projects.

Not all users were satisfied with support vendors. In 4 of 23 support projects, users reported they were not positive about vendor work.

Assignments of support vendors involved varying numbers of vendor personnel. Some users added to the vendor personnel by hiring contract personnel to work with the support vendors. For R2 projects, an average of 2 senior and 6 junior personnel from support vendors were used. For R3 projects, an average of 2.9 senior and 7.2 junior personnel were used.

Users report that support is needed in most cases. Of 20 users of R3 software, 18 felt that all or most needed aid, and 2 weren't sure what percent needed it. Of 4 users that did not use a support vendor, all felt that most or over half of SAP users needed it.

Thirteen of the 20 R3 users who employed a support vendor reported that their vendor had a center of excellence. Several users pointed out that all the key vendors had centers of excellence, but that many users took it for granted as an essential part of a SAP support program.

All 20 R3 users who used a support vendor expected the vendor experience to include a high level of SAP knowledge.

B. Exhibits of Information from Users

A set of exhibits follow which summarizes the information obtained from users. The information was difficult to collect since many users had signed a commitment to provide no information about SAP software products to unauthorized parties.

Industries Represented

R2 Users	Industry
1	Food Mfg.
1	Petroleum
2	Chemical
1	Discrete Mfg.
1	Utility

R3 Users	Industry
2	Food Mfr.
4	Petroleum
2	Chemical
3	Pharm.
9	Discrete
1	Wholesale
1	Education
1	Utility
1	Bus. Serv. (Real Estate)

R2 Support

Number of Respond.	SAP Support Vendors	Evaluation of Support
1	P W and ICS	Positive
1	ICS	Positive
1	McKinsey (Used Profess. Services Vendors also)	Neutral
3	None Used (For one of these, SAP Subcontracted work to D & T)	

Functions Implemented by R2 Users

Functions	Aid Obtained From
Sales, Distribution, General Ledger	PW, ICS
Purchasing, AR, Sales, Order Processing	McKinsey and Profess. Serv. Vendors
Everything but HR and Payroll	ICS
Finance, Material Mgmt., Plant Management	No Support Vendor (Profess. Service Vendors aided)
Order Process, Mainten., Payroll, Finance, Fixed Assets, HR	No Support Vendor (Profess. Service Vendors aided)
Purchasing, Materials Mgmt.	No Support Vendor (SAP used D & T as subcontractor)

Support Provided For R2 Users

Average Personnel Provided

Senior	2
Junior	6

Note: Users obtained contract personnel from Profess. Serv. vendors to use on project. SAP also assigned personnel.

Analysis of R2
Project Time

Activity	Average Time Taken
Decision for SAP	5.3 Months
Time to Implement	14 Months plus (4 Respondents would only say more than 1 year)
Is Project Finished	All report it is

Characteristics of Aid for R2 Support

Characteristic	User Report
Reengineering Assistance	In 2 of 3 Support assignments (One of these was a team of 2 vendors)
Use of Models	1 used business models
Centers of Excellence	In 2 of 3 support situations, centers of excellence existed.
Experience of Vendor	1-Reports high level experience. 2-Are not sure of vendor experience, but think it is more than other vendors.
Strengths of Vendors	1-Practical experience with SAP 1-Most experience with SAP 1-Not sure

Necessity for Using A Support Vendor with R2

User Group	Attitude toward Vendor Aid
3 who used Vendor aid	2 Report all SAP users need it 1 Reports most should use it
3 who did not use Support Vendor	1 Reports most need aid 2 Reports an average of 50% need aid

Rating of Support Vendors by R2 Users

Vendor	Average Rating *
Andersen Consulting	3 (Rated by 3)
Price Waterhouse	3.5 (Rated by 4)
Deloitte & Touche	4 (Rated by 3)
Coopers & Lybrand	3.5 (Rated by 2)
ICS	4.3 (Rated by 4)
IBM	4 (Rated by 2)
SHL	3.5 (Rated by 2)
McKinsey	4 (Rated by 1)

* Where 5=high and 1=low

R3 Support

Number of Respondents	SAP Support Vendors	Evaluation of Support
6	Andersen Consulting	Positive
1	Price Waterhouse	Positive
1	ICS	Positive
1	McKinsey	Positive
1	Ernst & Young	Positive
1	KPMG	Negative
1	Big 6 (Won't name)	Positive
1	ICS and D & T	Positive
1	Andersen Consulting, D & T, Price Waterhouse	Neutral
1	Andersen Consulting, Deloitte & Touche	Positive
1	Price Waterhouse, IBM CGS, Sercon	Negative for first 3; Positive for Sercon
1	ICS, IBM, Price Waterhouse	Positive
1	Andersen Consulting Price Waterhouse	Positive
1	ICS, Siemans Nixdorf	Positive
1	DRT Systems	Positive
4	None Used	

Analysis of R3 Support

Vendor	How often used
Anderson Consulting	6 alone, 3 as part of teams
Price Waterhouse	1 alone, 4 as part of teams
Deloitte & Touche	0 alone, 3 as part of teams (used by SAP in at least 2 situations)
ICS	1 alone, 3 as part of teams
Other	5 alone, 4 as part of teams

Functions Implemented by R3 Users

Functions	Number of Respondents
Most or all	5
Combinations of Accounting, Financial, Sales Distribution, Production Planning, Inventory Control	7
Combinations of above plus Material Management	2
Production Planning, HR, Sales, Financial	1
Financial	3
Purchasing	1
Order Entry	1

Personnel Support Provided for R3 Users

Average Personnel Provided

Senior	2.9
Junior	7.2

Note: Users obtained contract personnel from Professional Services vendors to use on project SAP also assigned personnel.

Analysis of R3 Project Time

Activity	Time Taken
Decision for SAP	Range from 3 to 30 months. Average of 8.6 months
Time to Implement	Range from 4 to 39 months. (Some are enterprise wide programs)
Is Project Finished	12 of 24 R3 users report "no". 2 of these are within one month of completion.

Characteristics of Aid For R3 Support

Characteristic	Users Report
Reengineering Assistance	In 8 of 20 support situations, support vendor provided it. In 3 others, another vendor provided.
Use of Models	4 report vendors used functional models 3 report vendors used in industry models 2 report vendors used application models
Centers of Excellence	13 users report their vendor had one.
Experience of Vendor (For 20 who used a vendor)	5 report "High quality SAP knowledge" 5 "More than anyone else about SAP" 4 "Many SAP clients" 1 "Know SAP technology" 3 Refuse to answer 2 Don't know, but expected SAP knowledge
Strengths of Vendor (For 20 who used a vendor)	8 "Knowledge of R3" 4 "Past experience with SAP" 3 "Know our industry (and SAP)" 1 "Consulting strength" 1 "Size of Vendor and SAP knowledge" 1 "Relations with SAP" 2 Not sure

Necessity for Using A Support Vendor with R3

User Group	Attitude toward Vendor Aid
20 who used Vendor Aid	9 Report all R3 users need aid 2 Report most users need it. 7 Report an average of 60% need it. 2 Can't estimate
4 who did not use Vendor Aid	1 Reports most users need it. 3 Report an average of 57% need it.

Rating of Support Vendors By R3 Users

Vendor	Average Rating *	
Andersen Consulting	3.6	(Rated by 16)
Price Waterhouse	3.1	(Rated by 11)
Deloitte & Touche	3.1	(Rated by 9)
ICS	3.6	(Rated by 11)
C & L	2.8	(Rated by 6)
SHL	2.5	(Rated by 2)
IBM	4.5	(Rated by 2)
McKinsey	4.0	(Rated by 1)

* Where 5=High and 1 =Low

Comments About Vendors

Vendor	Comment
Andersen Consulting	Large number of support personnel. Long experience with SAP. Has worked with SAP since early R2 installations. Cost of consulting is 3 to 5 times software costs. Know business of big oil companies. Well connected with SAP.
Price Waterhouse	Comprehensive program and diskette that describes it. Knows technology. Andersen and Price lead the field. They were taxed by the size of our job.
ICS	Ahead of others in knowledge of software. Dedicated to SAP business. Most experience with R3. Know how to run SAP projects.
Deloitte & Touche	Brought in by SAP, but doesn't know R3 system as well as ICS. Has experience with SAP business.
McKinsey	Consulting strength. Others know more about SAP.
IBM	Is trying to gain strength with SAP. Wants to get more support jobs for SAP.

Vendor Techniques for Gaining Additional Business

Technique	Reported by
Perform reengineering for client	Andersen Consulting, Price Waterhouse, and ICS clients.
Promote enterprise wide projects.	Andersen Consulting, Price Waterhouse clients.
Client/Server training and support	Andersen Consulting, Price Waterhouse and D&T clients
Related projects	Andersen Consulting, Price Waterhouse and D&T clients

ORDER/INVOICE/FULFILLMENT

Acctg. ONLY

Inv. Comp.	By:	Date:	Client #	Order	Inv. #	Multi-Invoicing of

CUSTOMER/INVOICE TO

ORIGINATOR (Signature) _____ DATE 11/22/94

APPROVALS

Company EDS

Name Mr./Ms. Richard Scott

Position _____

Address TAS - Engineering / Mfg
H3-2E-70 5400 Legacy Dr

City Plano

Province _____

Phone 214-605-1870

CA Tax Rate _____

CT Tax 8% _____

Salutation _____

State TX

Zip 75024

Country _____

Fax _____

Tlx _____

VP Sales/Res. _____ Date 11/22

Controller _____ Date _____

Special instructions for invoicing, progress billing, or delayed payments, etc.

Standard - 1/2 up front

ORDER

Contract Year Beg. _____
End _____

❑ New Order (N1) ❑ Prior Yr (N3)
❑ Renewal (N2) ❑ Cancel

Invoice Type
❑ Fulfillment Only
❑ W/Order (OR)
❑ Monthly (MO)
❑ Quarterly (QT)
❑ Pending

Employee # Sold by:
TR 60%
Bob G 40%
% %

Employee # Commission to:
Diane L 100%
% %

CLIENT AUTH.

PO# _____ INPUT Contract ❑ Letter ❑ Verbal ❑

Attach all authorizing documents to white (contract) copy.

SHIP TO

Company _____
Name Mr./Ms. Same
Position _____
Address _____
_____
City _____
Province _____
Salutation _____
State _____
Zip _____
Country _____
Phone _____

ITEM TYPE

- Subscription (SB)
- Custom (YC/ZC/KC)VC
- Multiclient (MC)
- Reports (RP)
- Copies (CP)
- Consult/Present (PR)
- Newsletter (NL)
- Reimbursed Costs (EX)
- Merger/Acq. (ME)
- Exec Overview (EO)
- Conf/Seminar (CN)

DETAIL

Indicate US, UK, FR, VA	Prod. ID/Year	Item Type Code	Item Description or Title	Quantity	Price	Shipped By	Date
US	YNED1	YC	SAP Service Analysis		$41,000		
			Includes expenses $1,000 inboarded				

Fulfillment to be completed in: ❑ Corporate ❑ London ❑ Virginia ❑ France ❑ Other _____

• White - Contract • Green - Fulfillment • Yellow - Invoice • Pink - Originator • Goldenrod - Sales Manager

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INPUT

ORDER/INVOICE/FULFILLMENT

Acctg. ONLY

Inv. Comp.	By:	Date:	Client #	Order #	Inv. #	Multi-Invoicing of

CUSTOMER/INVOICE TO

ORIGINATOR (Signature) _____ DATE 11/22/94

Company EDS

Name Mr./Ms. Richard Scott

Position

Address TAS - Engineering / Mfg
H3-2E-70 5400 Legacy Dr

City Plano

Province

Phone 214-605-1870

CA Tax Rate

CT Tax 8%

Salutation

State TX

Zip 75024

Country

Fax

Tlx

APPROVALS

VP Sales/Res. _____ Date 11/22

Controller _____ Date

ORDER

Special instructions for invoicing, progress billing, or delayed payments, etc.

Standard - ½ up front

Contract Year Beg. _____
End _____

❑ New Order (N1) ❑ Prior Yr (N3)
❑ Renewal (N2) ❑ Cancel

Invoice Type ❑ Fulfillment Only ❑ W/Order (OR) ❑ Monthly (MO) ❑ Quarterly (QT) ❑ Pending

Employee # Sold by: TLR 60% Bob C 40% _____ %

Employee # Commission to: Diane L 100% _____ % _____ %

CLIENT AUTH.

PO# _____ INPUT Contract ❑ Letter ❑ Verbal ❑

Attach all authorizing documents to white (contract) copy.

SHIP TO

Company

Name Mr./Ms. Same

Position

Address

City

Province

Salutation

State

Zip

Country

Phone

ITEM TYPE

- Subscription (SB)
- Custom (YC/ZC/KC)VC
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• White - Contract • Green - Fulfillment • Yellow - Invoice • Pink - Originator • Goldenrod - Sales Manager

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INPUT

PROJECT WORK STATEMENT

TITLE SAP Services Analyses

CLIENT EOS

CONTRACT: ATTACHED X TO FOLLOW ____ LETTER ____ VERBAL ____

PROJECT LEADER TCR PROJECT CODE YNED.1

DATE STARTED 11/22/94 PLANNED COMPLETION DATE 12/23/94

LEVEL OF EFFORT(Professional Man Days) 24½

TOTAL CONTRACT VALUE: $ or £ 41,000 (inboarded expenses)

REVENUE DISTRIBUTION (% or $) INPUT US 100 INPUT LTD ____

REIMBURSABLE EXPENSES: NO X

YES ____

EXP. BUDGET 1,000 TO COVER: TRAV: ✓
TELE: ____
RPT. PREP.: ✓
OTHER: ____

BILLING SCHEDULE DESCRIPTION Standard ⅓ up front

PROJECT DESCRIPTION

- Assess 4 major providers of SAP-related services
- Interview SAP customers to understand service vendor selection criteria

INDICATE TYPE OF WORK: REPORT X PRESENTATION ____

THANK YOU PACKAGE: YES ____ NO ____

ACCOUNTING USE ONLY: ENTERED ON CURRENT PROJECT LIST ____

DISTRIBUTI

CONTRACT FILE

LIBRARY FILE

NEW JERSEY

INPUT LTD.

Originator

SHEILA (Y&Z on

BINDER COPY

Date Typed

PROJECT SCHEDULE

EDS - SAP

Activity	Name	Act. Days	Factor	ESD	Week 1	2	3	4	5	6	7	8	9	10	11	12	13	14
Matrix dev.				1	1													
4 vendors @ 3				12	3	3	3	3										
30 46 users				2	1	1												
User An				2		1	1											
Discussion				2		½	1	½										
Rpt prp				3			1	2										
Pres				2														
TY				½														
TOTAL PLAN SR.					24.5													
TOTAL PLAN RA					24.5 × 1.6 = 39.0													
TOTAL PLAN ESDs																		

Proj. Code: _____ Proj. Name: _____ Prepared by: TAR

Proj. Manager: _____ Date: 11/15 rev 11/22